

CLAIMS

1. A method of enabling graphic design by means of a computer system, the method including the steps of:

5 printing on demand, on a surface, a form containing information relating to a graphic design activity, and at the same time as printing said information, printing on the surface coded data indicative of an identity of the form and of at least one reference point of the form;

10 receiving, in a computer system, indicating data from a sensing device regarding the identity of the form and a position of the sensing device relative to the form, the sensing device, when placed in an operative position relative to the form, sensing the indicating data using at least some of the coded data; and

15 identifying, in the computer system and from the indicating data, at least one parameter relating to the graphic design activity.

2. The method of claim 1 in which said at least one parameter relating to the graphic design activity is associated with at least one zone of the form and in which the method includes identifying, in the computer system and from the zone relative to which the sensing device is located, said at least one parameter.

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3. The method of claim 2 including the steps of:

receiving, in the computer system, data regarding movement of the sensing device relative to the form, the sensing device sensing its movement relative to the form using at least some of the coded data; and

25 identifying, in the computer system and from said movement being at least partially within said at least one zone, said at least one parameter of the graphic design activity.

4. A method of enabling graphic design by means of a computer system, the method including the steps of:

printing on demand, on a surface, a form containing information relating to a graphic design activity, and at the same time as printing the information, printing on the

5 surface coded data indicative of at least one parameter of the graphic design activity;

receiving, in a computer system, data from a sensing device regarding said at least one parameter and regarding movement of the sensing device relative to the form, the sensing device, when moved relative to the form, sensing the data regarding said at least one parameter using at least some of the coded data and generating the data
10 regarding its own movement relative to the form; and

interpreting, in the computer system, said movement of the sensing device as it relates to said at least one parameter.

5. The method of claim 1 or claim 4 in which the parameter is an action parameter
15 of the graphic design activity, the method including effecting, in the computer system, an operation in respect of the action parameter.

6. The method of claim 5 in which the action parameter of the graphic design activity is selected from the group comprising:

20 selecting one or more graphic elements;

deleting a graphic element;

cutting a graphic element;

copying a graphic element;

pasting a graphic element;

25 rotating a graphic element;

translating a graphic element;

overlaying graphic elements;

enlarging a graphic element;

- reducing a graphic element;
- grouping a number of graphic elements into a single grouped graphic element;
- partitioning a single grouped graphic element into a number of individual graphic elements;
- 5 applying text to one or more graphic elements;
- smoothing a graphic element;
- applying an object from an object palette;
- applying a CPG operator from a CPG palette;
- snapping a graphic element to a grid; and
- 10 applying a stroke attribute to a graphic element.
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- 7. The method of claim 1 or claim 4 in which the parameter is an option parameter of the graphic design activity, the method including identifying, in the computer system, that a user has entered hand-drawn data by means of the sensing device and effecting, in
15 the computer system, an operation associated with the option parameter.
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- 8. The method of claim 7 in which the option parameter is associated with at least one of:
 - displaying a graphic grid;
 - 20 displaying one or more handles for manipulating a graphic element;
 - auto-arranging one or more graphic elements;
 - printing a form;
 - updating a form;
 - printing a representation of a drawing or painting;
 - 25 a pen shape;
 - a pen size;

a pen texture;

a pen color;

a fill color;

a fill pattern;

5 a text font;

a text font size;

a text font style; and

reprinting a form.

10 9. The method of claim 1 or claim 4 in which the parameter is a text parameter of the graphic design activity, the method including identifying, in the computer system, that a user has entered handwritten text data by means of the sensing device and effecting, in the computer system, an operation associated with the text parameter.

15 10. The method of claim 9 which includes converting, in the computer system, the handwritten text data to computer text.

11. The method of claim 10 in which the text parameter is associated with at least one of:

20 a text component of a graphic element;

a zoom selection; and

a degree of rotation selection.

12. The method of claim 1 or claim 4 in which the parameter is an authorisation
25 parameter of the graphic design activity, the method including identifying, in the computer system, that a user has entered a handwritten signature by means of the sensing device and effecting, in the computer system, an operation associated with the

authorisation parameter.

13. The method of claim 12 which includes verifying, in the computer system, that the signature is that of the user.

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14. The method of claim 13 in which the authorisation parameter is associated with the printing of one or more said forms.

10 15. The method of claim 1 or claim 4 in which the parameter is a drawing parameter of the graphic design activity, the method including identifying, in the computer system, that a user has entered a hand-drawn graphic element by means of the sensing device and effecting, in the computer system, an operation associated with the drawing parameter.

15 16. The method of claim 15, including printing a graphical representation of said hand-drawn graphic element.

17. The method of claim 1 or claim 4 in which the form contains information relating to at least one of:

- 20 one or more graphic elements;
a bounding box associated with a graphic element;
handles for manipulating a graphic element;
a drawing title;
a page number;
25 a grid size; and
a degree of zoom.

18. The method of claim 1 or claim 4 which includes printing the coded data to be substantially invisible in the visible spectrum.

19. The method of claim 1 including retaining a retrievable record of each form
5 generated, the form being retrievable using its identity as contained in its coded data.

20. The method of claim 1 or claim 4 in which the sensing device contains an identification means which imparts a unique identity to the sensing device and identifies it as being associated with a particular user and in which the method includes
10 monitoring, in the computer system, said identity.

21. The method of claim 1 or claim 4 including providing all required information relating to the graphic design activity in the form to eliminate the need for a separate display device.

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22. The method of claim 1 or claim 4 in which the form is printed on multiple pages and in which the method includes binding the pages.

23. A system for enabling graphic design by means of a computer system,
20 including:

a form printed on a surface, the form containing information relating to a graphic design activity, the form including coded data indicative of an identity of the form and of at least one reference point of the form;

a printer operative to print on demand the form by printing on the surface the
25 information and at the same time the coded data; and

a computer system for receiving indicating data from a sensing device for identifying at least one parameter relating to the graphic design activity, the indicating data being indicative of the identity of the form and a position of the sensing device

relative to the form, the sensing device sensing the indicating data using at least some of the coded data.

24. The system of claim 23 in which said at least one parameter relating to the
5 graphic design activity is associated with at least one zone of the form.

25. The system of claim 23 including the sensing device, the sensing device sensing its movement relative to the form using at least some of the coded data.

10 26. A system for enabling graphic design by means of a computer system, including:

a form printed on a surface, the form containing information relating to a graphic design activity, the form including coded data indicative of at least one parameter of the graphic design activity;

15 a printer operative to print on demand the form by printing on the surface the information and at the same time the coded data; and

a computer system for receiving data from a sensing device regarding said at least one parameter and regarding movement of the sensing device relative to the form, and for interpreting said movement of the sensing device as it relates to said at least one
20 parameter, the sensing device, when moved relative to the form, sensing the data regarding said at least one parameter using at least some of the coded data and generating the data regarding its own movement relative to the form.

27. The system of claim 23 or claim 26, in which said at least one parameter of the
25 graphic design activity is selected from the group comprising an action parameter of the graphic design activity, an option parameter of the graphic design activity, a text parameter of the graphic design activity, an authorisation parameter of the graphic design activity, and a picture parameter of the graphic design activity.

28. The system of claim 27 in which the action parameter of the graphic design activity is selected from the group comprising:

- selecting one or more graphic elements;
- deleting a graphic element;
- 5 cutting a graphic element;
- copying a graphic element;
- pasting a graphic element;
- rotating a graphic element;
- translating a graphic element;
- 10 overlaying graphic elements;
- enlarging a graphic element;
- reducing a graphic element;
- grouping a number of graphic elements into a single grouped graphic element;
- partitioning a single grouped graphic element into a number of individual
- 15 graphic elements;
- applying text to one or more graphic elements;
- smoothing a graphic element;
- applying an object from an object palette;
- applying a CPG operator from a CPG palette;
- 20 snapping a graphic element to a grid; and
- applying a stroke attribute to a graphic element.

29. The system of claim 27 in which the option parameter is associated with at least one of:

- 25 displaying a graphic grid;
- displaying one or more handles for manipulating a graphic element;

auto-arranging a plurality of graphic elements;
printing a form;
updating a form;
printing a representation of a drawing or painting;

- 5 a pen shape;
a pen size;
a pen texture;
a pen color;
a fill color;
10 a fill pattern;
a text font;
a text font size;
a text font style; and
reprinting a form.

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30. The system of claim 27 in which the text parameter is associated with at least one of:

a text component of a graphic element;
a zoom selection; and

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a degree of rotation selection

31. The system of claim 27 in which the authorisation parameter is associated with the printing of one or more said forms.

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32. The system of claim 27 in which the picture parameter is associated with at least one hand-drawn graphic element.

33. The system of claim 23 or claim 26 in which the sensing device includes a marking nib.

5 34. The system of claim 23 or claim 26 in which the sensing device contains an identification means which imparts a unique identity to the sensing device and identifies it as belonging to a particular user.

10 35. The system of claim 23 or claim 26 in which the coded data is substantially invisible in the visible spectrum.

36. The system of claim 23 or claim 26 which includes a database for keeping a retrievable record of each form generated, each form being retrievable by using its identity as included in its coded data.

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37. The system of claim 23 or claim 26 in which, to cater for a form printed on multiple pages, the printer includes a binding means for binding the pages.